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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,550	11/21/2003	Hirotsugu Komiya	245602US0	9240
22850	7590	02/04/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			MARCHESCHI, MICHAEL A	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,550

Applicant(s)

KOMIYA ET AL.

Examiner

Michael A Marcheschi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because the phrases “the mother liquid” and “the adsorption rate” lack antecedent basis since a “mother liquid” and an “adsorption rate” have not been literally defined before.

Claim 2 is indefinite because the phrase “the silica adsorption rate” lacks antecedent basis since a “silica adsorption rate” has not been literally defined before (before this phrase).

Claim 2 is also indefinite as to the phrase “a certain value” because the examiner is unclear as to what this encompasses, thus rendering the scope of the claim unclear.

Claim 2 is also indefinite as to the limitation “are selected or identified” because the claim does not definitely define what values are selected or identified, thus rendering the scope of the claim unclear.

Claim 2 is also indefinite because the claim is directed to a polishing method but no definite polishing step is defined (i.e. the claim should set forth “polishing a glass with the composition...”).

Claim 2 is also indefinite as to the way it is written because it is not defined in a clear and concise manner (i.e. the limitation “claim 1...or identified” adds confusion to the claim, as written).

Claim 4 is indefinite because the phrase “the main component” lacks antecedent basis since a “main component” has not been literally defined before (before this phrase).

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Claim 4 is also indefinite because the phrase "the silica adsorption rate" lacks antecedent basis since a "silica adsorption rate" has not been literally defined before (before this phrase).

Claims 4 is also indefinite because the phrase "the abrasive grains" lacks antecedent basis since "abrasive grains" has not been literally defined before (before this phrase).

Claim 9 is indefinite as to the phrase "is used" because this phrase, in the context of the claim, does not define the claim in a clear and concise manner.

The other claims are indefinite because they depend on indefinite claims.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 02/062917 (U.S. patent 6,843,816 is based on this WO reference and is thus used as a certified English translation of the above WO reference).

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The WO reference teaches in the abstract and page 3, line 22-page 9, line 11 (corresponds to the teaching in column 2, line 60-column 6, line 45 of the U.S. document), a cerium oxide abrasive which comprises cerium oxide, a fluorine compound, and calcium phosphate. Page 13, line 26-page 14, line 11 (corresponds to the teaching in column 9, line 49+ of the U.S. document) teaches that the abrasive is classified to remove particles larger than 10 microns.

The claimed invention is anticipated by the reference because the reference teaches a composition which comprises all of the claimed components. With respect to the silica adsorption limitation, it appears that the cerium abrasive grain is the same and thus it is the examiners position that this limitation is inherent absent evidence to the contrary. In addition, the reference makes no mention of any silica adsorption, thus reading on "at most 50%. In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention because the silica adsorption is expected (103) and therefore obvious because the same material (abrasive grain) is expected to have the same property (i.e. silica adsorption) absent evidence to the contrary.

Claims 10-12 are rejected under 35 U.S.C. 103(a) as obvious over WO 02/062917 (**U.S. patent 6,843,816 is based on this WO reference and is thus used as a certified English translation of the above WO reference).**

With respect to the size, the reference teaches that the abrasive is classified to remove particles larger than 10 microns, thus suggesting a particle size smaller than 10 microns, which is within the claimed range. With respect to the strength, this is expected and therefore obvious

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because the same material (abrasive grain) is expected to have the same property (i.e. strength) absent evidence to the contrary.

Claims 4, 5, 10 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 1243633.

The reference teaches in the abstract and section [0054], a cerium oxide abrasive, having the claimed size, which comprises cerium oxide and a fluorine compound.

The claimed invention is anticipated by the reference because the reference teaches a composition which comprises all of the claimed components. With respect to the silica adsorption limitation, it appears that the cerium abrasive grain is the same and thus it is the examiners position that this limitation is inherent absent evidence to the contrary. In addition, the reference makes no mention of any silica adsorption, thus reading on "at most 50%. In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention because the silica adsorption is expected (103) and therefore obvious because the same material (abrasive grain) is expected to have the same property (i.e. silica adsorption) absent evidence to the contrary. With respect to the strength, this is inherent (102) or expected and therefore obvious (103) because the same material (abrasive grain) is expected to have the same property (i.e. strength) absent evidence to the contrary.

Claims 4 and 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cadien et al.

The reference teaches in claim 1, a cerium oxide abrasive having the claimed size.

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The claimed invention is anticipated by the reference because the reference teaches a composition which comprises all of the claimed components. With respect to the silica adsorption limitation, it appears that the cerium abrasive grain is the same and thus it is the examiners position that this limitation is inherent absent evidence to the contrary. In addition, the reference makes no mention of any silica adsorption, thus reading on "at most 50%. In the alternative, no patentable distinction is seen to exist between the reference and the claimed invention because the silica adsorption is expected (103) and therefore obvious because the same material (abrasive grain) is expected to have the same property (i.e. silica adsorption) absent evidence to the contrary. With respect to the strength, this is inherent (102) or expected and therefore obvious (103) because the same material (abrasive grain) is expected to have the same property (i.e. strength) absent evidence to the contrary.

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

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The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976)".

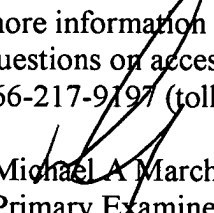
Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/05
MM


Michael A Marcheschi
Primary Examiner
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